

Contents of *Aquaculture*, Volume 97

VOL. 97 NO. 1

1 SEPTEMBER 1991

Genetics and Breeding

- Genetic variation in susceptibility of Atlantic salmon to furunculosis
T. Gjerdem, R. Salte and H.M. Gjøen (Ås, Norway) 1
- On the comparative karyomorphology of three Indian major carps, *Catla catla* (Hamilton), *Labeo rohita* (Hamilton) and *Cirrhinus mrigala* (Hamilton)
S.-M. Zhang (Shashi, China) and P.V.G.K. Reddy (Bhubaneswar, India) 7

Husbandry and Management

- The Iceland scallop, *Chlamys islandica* (O.F. Müller) in Breidafjörður, west Iceland. I.
Spat collection and growth during the first year
G.G. Thorarindóttir (Reykjavík, Iceland) 13
- Mass-culture of *Cancer irroratus* larvae (Crustacea, Decapoda): adaptation of a flow-through sea-water system
M. Charmantier-Daures and G. Charmantier (Montpellier, France) 25
- Growth, survival and cannibalism of cod juveniles (*Gadus morhua*): effects of feed type, starvation and fish size
A. Folkvord (Storebø, Norway) 41

Nutrition

- Biochemical quality of marine unicellular algae with special emphasis on lipid composition. I. *Isochrysis galbana*
A. Sukenik and R. Wahnou (Haifa, Israel) 61

Physiology and Endocrinology

- Digestibility, tissue distribution and depletion kinetics of [¹⁴C]-virginiamycin and related factors fed to rainbow trout
J.P. Cravedi, M. Baradat (Toulouse, France) and G. Choubert (St Pée sur Nivelle, France) 73
- Residues of oxolinic acid and oxytetracycline in fish and sediments from fish farms
H.V. Björklund, C.M.I. Råbergh and G. Bylund (Åbo, Finland) 85
- Plasma androgen levels in castrated adult male African catfish, *Clarias gariepinus*, in relation to pheromonal stimulation of ovarian growth in pubertal conspecifics
J.H. van Weerd, A.B.J. Bongers (Wageningen, Netherlands), R. Schulz (Utrecht, Netherlands), M. Sukkel and C.J.J. Richter (Wageningen, Netherlands) 97

VOL. 97 NOS. 2/3

15 SEPTEMBER 1991

Diseases, Parasites and Predators

- Viral infection (picorna-like virus) associated with mass mortalities in hatchery-reared sea-bass (*Dicentrarchus labrax*) larvae and juveniles
G. Breuil (Palavas-les-Flots, France), J.R. Bonami (Montpellier, France), J.F. Pepin and Y. Pichot (Palavas-les-Flots, France) 109

- Comparison of western blot, direct fluorescent antibody and drop-plate culture methods for the detection of *Renibacterium salmoninarum* in Atlantic salmon (*Salmo salar* L.)
S.G. Griffiths (Fredericton, N.B., Canada), G. Olivier, J. Fildes (Halifax, N.S., Canada) and W.H. Lynch (Fredericton, N.B., Canada) 117

Genetics and Breeding

- Evaluation of genetic variability in a domestic population of *Penaes vannamei* (Boone): a comparison with three natural populations
S.L.F. Sunden and S.K. Davis (College Station, TX, USA) 131

Husbandry and Management

- The influence of wave frequency and wave height on the behaviour of rainbow trout (*Oncorhynchus mykiss*) in cages
R.K. Srivastava, J.A. Brown and J. Allen (St. John's, Nfld., Canada) 143
- Growth patterns of pike (*Esox lucius* L.) larvae and juveniles in small ponds under various natural temperature regimes
C. Bry, M.G. Hollebecq (Jouy-en-Josas, France), V. Ginot (Villeurbanne, France), G. Israel and J. Manelphe (Jouy-en-Josas, France) 155
- Osteological abnormalities in laboratory reared sea-bass (*Dicentrarchus labrax*) fingerlings
Ch. Daoulas, A.N. Economou and I. Bantavas (Athens, Greece) 169

Nutrition

- Influence of the biochemical composition of food on the biochemical composition of the rotifer *Bracionus plicatilis*
A.V. Frolov, S.L. Pankov, K.N. Geradze, S.A. Pankova and L.V. Spektorova (Moscow, USSR) 181
- Pigmentation of rainbow trout with astaxanthin at different water temperatures
H.K. No and T. Storebakken (Sunndalsøra, Norway) 203

Physiology and Endocrinology

- Adaptation of the brook trout, *Salvelinus fontinalis*, to direct transfer to sea water in spring and summer
M. Besner (Rimouski, Que., Canada) and D. Pelletier (Quebec, Que., Canada) 217
- Effect of physiological condition and smoltification status at smolt release on subsequent catches of adult salmon
E. Virtanen, L. Söderholm-Tana, A. Soivio, L. Forsman and M. Muona (Helsinki, Finland) 231
- Cryopreservation of the spermatozoa of *Crassostrea tulipa* and three other oysters
K. Yankson and J. Moyse (Swansea, UK) 259
- Offspring fitness and fecundity of an Indian major carp, *Labeo rohita* (Ham.), in relation to egg size
H.S. Sehgal and H.S. Toor (Ludhiana, India) 269
- Combined effects of temperature and salinity on embryonic development and hatching of striped mullet, *Mugil cephalus*
W.A. Walsh, C. Swanson and C.-S. Lee (Honolulu, HI, USA) 281
- Spermiation response of mature rabbitfish, *Siganus guttatus* Bloch, to luteinizing hormone-releasing hormone analogue (LHRHa) injection
L.M.B. Garcia (Iloilo, Philippines) 291

Technical Paper

- A new method for electron-microscopical fixation of spermatozoa of freshwater teleosts
F. Lahnsteiner and R.A. Patzner (Salzburg, Austria)..... 301

VOL. 97 NO. 4**1 OCTOBER 1991****Diseases, Parasites and Predators**

- Bioavailability of oxolinic acid in Atlantic salmon (*Salmo salar* L.) from medicated feed
S.O. Hustvedt, R. Salte, O. Kvendset and V. Vassvik (Ås, Norway)..... 305
- The detection of *Bonamia ostreae* (Pichot et al. 1980) in frozen oysters (*Ostrea edulis* L.) and the effect of the parasite on condition
E. Rogan, S.C. Culloty, T.F. Cross and M.F. Mulcahy (Cork, Ireland) 311

Genetics and Breeding

- The characterization of *Ostrea denselamellosa* (Mollusca, Bivalvia) chromosomes: karyotype, constitutive heterochromatin and nucleolus organizer regions
A. Insua and C. Thiriot-Quévreux (Villefranche-sur-Mer, France) 317
- Karyological studies on the freshwater prawn *Macrobrachium rosenbergii*
C. Chávez Justo (Tokyo, Japan), M. Murofushi (Mishima, Japan), K. Aida and I. Hanyu (Tokyo, Japan)..... 327

Husbandry and Management

- Environment and development of benthos in earthen trout ponds in Central Scotland
M.A. Wahab and H.P. Stirling (Stirling, UK) 335

Physiology and Endocrinology

- The effect of SDA, temperature and daily rhythm on the energy metabolism of the mullet *Mugil saliens*
J. Guinea and F. Fernández (Barcelona, Spain)..... 353
- Ovulatory rhythms and egg viability in the Atlantic halibut (*Hippoglossus hippoglossus*)
B. Norberg (Storebø, Norway), V. Valkner (Storebø and Bergen, Norway), J. Huse, I. Karlsen (Storebø, Norway) and G. Lerøy Grung (Storebø and Bergen, Norway)..... 365
- Induced spawning of Indian major carps and maturation of a perch and a catfish by murrel gonadotropin releasing hormone, pimozide and calcium
S. Halder, S. Sen, S. Bhattacharya, A.K. Ray (Santiniketan, India), A. Ghosh and A.G. Jhingran (Barrackpore, India) 373

Nutrition

- Effects of dietary lipid and carbohydrate levels on growth and body composition of juvenile red drum, *Sciaenops ocellatus*
S.C. Ellis and R.C. Reigh (Baton Rouge, LA, USA)..... 383

Book Review

- Production of aquatic animals..... 395

- Announcement..... 398

- Author Index..... 399